

**ABSTRACT OF THE DISCLOSURE**

A method and apparatus for heating a workpiece. An induction heating system is used to induce magnetic fields in a workpiece to inductively heat the workpiece. The induction heating system may comprise a portable power source, a portable power source controller, a fluid-cooled induction heating cable, and a portable cooling unit. The induction heating system may be used to perform a variety of induction heating operations, including: annealing, surface hardening, heat treating, stress-relieving, curing, shrink-fitting, etc.